



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,330	04/01/2004	Carl Rajsic	ALC 3124	5344
<div>7590 01/08/2008</div> <div>KRAMER & AMADO, P.C. 1725 Duke Street, Suite 240 Alexandria, VA 22314</div>				
			<div>EXAMINER</div> <div>MOORE JR, MICHAEL J</div>	
			<div>ART UNIT</div> <div>2619</div>	<div>PAPER NUMBER</div>
			<div>MAIL DATE</div> <div>01/08/2008</div>	<div>DELIVERY MODE</div> <div>PAPER</div>

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,330

Applicant(s)

RAJSIC, CARL

Examiner

Michael J. Moore, Jr.

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 12/6/07 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 112

Amendments made by Applicant to claims **11 and 13** to obviate the claim rejections under 35 U.S.C. 112, 2nd paragraph presented in the previous Office Action are proper and have been entered. These particular rejections have been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1, 4, 5, 7, and 9-13** are rejected under 35 U.S.C. 102(e) as being anticipated by Hall, Jr. et al. (U.S. 7,130,393) (hereinafter "Hall"). *Hall* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim **1**, "a method of establishing a secure Layer-3 connection across an ATM network, the Layer-3 connection having a first endpoint at an egress port of an originating multiservice switch (MSS) and a second endpoint at an ingress port of a

terminating MSS" is anticipated by the SVC for VtoA establishment performed among calling party 20 (first endpoint), called party 22 (second endpoint), ATM edge switch 14 (originating multiservice switch), and MSCP 44 (terminating MSS) as shown in Figure 1.

"Configuring the terminating MSS with anticipated security information" is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

"At the originating MSS, generating a setup message including embedded security information" is anticipated by the generation of an input ATM setup message including a VtoA designator and called party number parameter (embedded security information) as spoken of on column 12, lines 29-34.

"Sending the setup message to the terminating MSS" is anticipated by the interception of the input ATM setup message by ASIP 40 and subsequent forwarding of information to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-48.

"At the terminating MSS, extracting the embedded security information from the setup message" is anticipated by the reception (extraction) of ATM setup message information by MSCP 44 and the subsequent retrieval of corresponding calling party closed user group identifiers as spoken of on column 19, lines 46-50.

"Determining whether the embedded security information matches the anticipated security information" is anticipated by the determination of whether a closed user group identifier (security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, “if the embedded security information matches the anticipated security information, establishing the Layer-3 connection” is anticipated by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20, lines 61-64.

Regarding claim 4, “wherein the embedded security information and the anticipated security information are Closed User Group Interlock Codes” is anticipated by the calling party and called party closed user group identifiers spoken of on column 19, lines 48-56.

Regarding claim 5, “wherein the Layer-3 connection is established by an originating user belonging to a configured set of originating users, and wherein the embedded security information and the anticipated security information are associated with the configured set of originating users” is anticipated by calling party 20 (originating user) that generates an ATM setup message as shown in Figure 1 and spoken of on column 12, lines 29-34.

Regarding claim 7, “wherein the Layer-3 connection is established to a terminating user belonging to a configured set of terminating users, and wherein the embedded security information and the anticipated security information are associated with the configured set of terminating users” is anticipated by called party 22 (terminating user) that receives an ATM setup message as shown in Figure 1 and spoken of on column 15, lines 1-6.

Regarding claim 9, “at the originating MSS, setting a value of a flag in the setup message to indicate that the setup message includes the embedded security

information" is anticipated by the VToA designator (flag) in the generated ATM setup message that indicates a request to set up an SVC for VToA service as spoken of on column 12, lines 29-34 and 65-67.

Lastly, "at the terminating MSS, reading the value of the flag before extracting the embedded security information" is anticipated by the extraction of information from the received ATM setup message and subsequent retrieval of closed user group identifiers (security information) as spoken of on column 19, lines 44-56.

Regarding claim 10, "An originating multiservice switch (MSS) for establishing a secure Layer-3 connection across an ATM network to a terminating MSS, comprising a call control for generating a Layer-3 connection setup message including embedded security information, and for sending the setup message to the terminating MSS" is anticipated by the ATM edge switch 14 (originating multiservice switch) that intercepts an ATM setup message and extracts information (embedded security information) from the message for subsequent forwarding to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-56.

Lastly, "wherein the embedded security information is compared with anticipated security information at the terminating MSS" is anticipated by the determination of whether a closed user group identifier (embedded and anticipated security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Regarding claim 11, "instructions for generating a Layer-3 connection setup message to be sent from an originating switch (MSS) to a terminating MSS; and

instructions for embedding security information within the setup message” is anticipated by the ATM edge switch 14 (originating multiservice switch) that intercepts an ATM setup message and extracts information (embedded security information) from the message for subsequent forwarding to MSCP 44 (terminating MSS) as spoken of on column 19, lines 44-56, as well as the data structure (instructions) stored on a storage media used for the VToA call establishment spoken of on column 4, lines 39-49.

Lastly, “the security information compared with anticipated security information at the terminating MSS” is anticipated by the determination of whether a closed user group identifier (embedded and anticipated security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Regarding claim 12, “a terminating multiservice switch (MSS) for establishing a secure Layer-3 connection across an ATM network from an originating MSS” is anticipated by MSCP 44 (terminating multiservice switch) of Figure 1 used for the establishment of an SVC VToA call as spoken of on column 14, lines 10-17.

“Stored anticipated security information” is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

“Means for querying a comparator of two pieces of security information” and “a call controller for receiving a Layer-3 connection setup message, for extracting embedded security information from the setup message, for querying the comparator to determine whether the embedded security information corresponds to the anticipated

security information” is anticipated by MSCP 44 (means, comparator, call controller) that determines whether a closed user group identifier (security information) that is common (match) to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, “establishing the Layer-3 connection in the event that the embedded security information corresponds to the anticipated security information” is anticipated by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20, lines 61-64.

Regarding claim 13, “instructions for receiving a Layer-3 connection setup message received from an originating multiservice switch” is anticipated by MSCP 44 that receives ATM setup message information as spoken of on column 19, lines 44-48.

“Instructions for extracting embedded security information from the setup message” is anticipated by the reception (extraction) of ATM setup message information by MSCP 44 and the subsequent retrieval of corresponding calling party closed user group identifiers as spoken of on column 19, lines 46-50.

“Instructions for retrieving anticipated security information” is anticipated by MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

“Instructions for determining whether the embedded security information corresponds to the anticipated security information” is anticipated by the determination of whether a closed user group identifier (security information) that is common (match)

to both the calling party and the called party exists as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Lastly, "instructions for establishing a Layer-3 connection in the event that the embedded security information corresponds to the anticipated security information" is anticipated by the successful establishment of the VToA call 520 in response to a positive response to steps 508, 510, and 514 of Figure 5 as spoken of on column 20, lines 61-64, as well as the data structure (instructions) stored on a storage media used for the VToA call establishment spoken of on column 4, lines 39-49.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall, Jr. et al. (U.S. 7,130,393) (hereinafter "Hall") in view of Shirakawa (U.S. 2002/0064159).

Regarding claims **2 and 3**, *Hall* teaches the method of claim 1. *Hall* also teaches where the closed user group identifiers (security information) is associated with the calling party and called party as spoken of on column 19, lines 48-59.

While *Hall* also teaches the use of switched virtual circuit (SVC) connections, *Hall* does not explicitly teach the use of Soft Permanent Virtual Circuit connections.

However, *Shirakawa* teaches the use of SPVC connections in an ATM environment as spoken of on page 1, paragraph 10.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to use the SPVC teachings of *Shirakawa* in place of the SVC teachings of *Hall* in order to provide an end-to-end ATM connection with fault tolerance as spoken of on page 1, paragraph 10 of *Shirakawa*.

6. Claims **6 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hall, Jr. et al. (U.S. 7,130,393) (hereinafter "Hall") in view of Bi et al. (U.S. 6,757,278) (hereinafter "Bi").

Regarding claims **6 and 8**, *Hall* teaches the method of claim 1. *Hall* does not teach connection establishment through IP interface addresses at the originating and terminating multiservice switches and where the security information is associated with these IP interface addresses.

However, *Bi* teaches a secure ATM system where IP-adapted SS7 traffic may be allowed to traverse the ATM network via IP interfaces as spoken of on column 7, lines 19-23.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the IP teachings of *Bi* with the teachings of *Hall* in order to provide secure ATM connection establishment in an IP-over-ATM environment.

Response to Arguments

7. Applicant's arguments filed 10/16/07 have been fully considered but they are not persuasive.

Regarding claims **1 and 10-13**, Applicant argues that *Hall* does not teach or suggest "configuring the terminating MSS with anticipated security information" as claimed.

However, as provided in the previous Office Action, *Hall* teaches MSCP 44 (terminating MSS) gathering called party closed user group identifiers (anticipated security information) as spoken of on column 19, lines 57-59.

It is held that these called party closed user group identifiers can be considered "anticipated security information", as a calling party closed user group identifier corresponding to a called party closed user group identifier is expected to be found (anticipated) in order to establish a connection as shown in step 508 of Figure 5, and spoken of on column 20, lines 1-22.

Therefore, since no further explanation is given to "anticipated security information" in the claim language, it is held that *Hall* teaches the above limitation in question.

Applicant further argues that *Hall* does not teach or suggest "at the terminating MSS, extracting the embedded security information from the setup message" as claimed. Applicant further argues that the MSCP shown in Figure 1 is not a terminating multi-service switch, but rather a multi-service control point used to provide additional functionality to ATM Edge Switch 14.

However, as provided in the previous Office Action, *Hall* teaches the reception (extraction) of ATM setup message information by MSCP 44 (terminating MSS) and the subsequent retrieval of corresponding calling party closed user group identifiers as spoken of on column 19, lines 46-50.

It is held that since the MSCP 44 provides the functionality corresponding to the "terminating MSS" as provided above, and serves as a multi-service control point coupled to ATM switch 14, that the MSCP can be broadly construed to be the claimed "terminating MSS", as no further explanation regarding the structure of this component is provided in the claim language.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571)

Application/Control Number:
10/814,330
Art Unit: 2619

Page 12

272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing F. Chan can be reached at (571) 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Moore, Jr.
Examiner
Art Unit 2619

mjm MM


WING CHAN
SUPERVISORY PATENT EXAMINER
1/4/08